

THE GENUS *HAUSTATOR*, SUBGENUS *KUROSIOIA*
IN AUSTRALIAN WATERS
(TURRITELLIDAE: MOLLUSCA)

T. A. GARRARD

Associate, The Australian Museum, Sydney

SUMMARY

Two species were included in *Haustator* (*Kurosioia*) in the revision of the Australian species of Turritellidae (Garrard, 1972). Further notes are now made on the protoconch of one species, and a further new species described and named.

SYSTEMATIC SECTION

Subfamily TURRITELLINAE Woodward, 1851

Genus *HAUSTATOR* Montfort, 1810

Haustator Montfort, 1810, *Conchyliologie Systematique*, 2:183. Type species by subsequent designation *Turritella imbricataria* Lamarck, (Guillaume, 1925, *Bull. Soc. Geol. France*, (4), 24-29).

Subgenus *KUROSIOIA* Ida, 1952

Kurosioia Ida, 1951, *Geological Survey of Japan*, Report 150:43. Type species by original designation *Turritella kurosio* Ida.

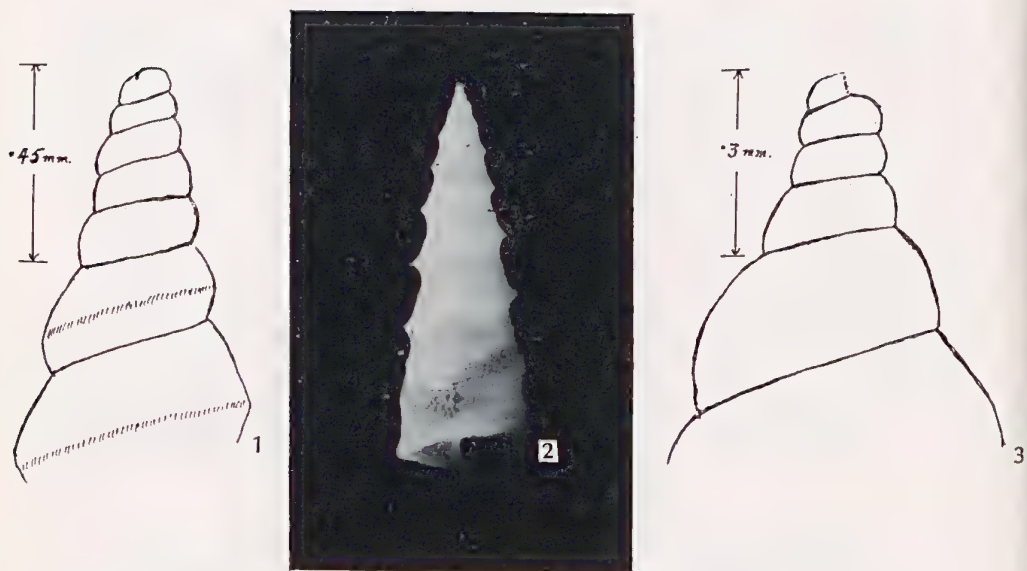
Subgeneric characteristics: Small to medium, thin, light in weight, whorls flatly convex, strongly centrally keeled in early whorls but diminishing with age, spire straight sided. Aperture sub-circular or sub-rhomboid. Base flatly convex or flatly concave. Protoconch three to five minute depressed convex whorls, nucleus flatly rounded. Labial sinus slightly prosocline, deep and moderately broad. Spirals which follow after initial keel are usually weak, some nodulose.

Remarks: The two species included in this subgenus previously were *Haustator* (*Kurosioia*) *cingulifer* Sowerby, 1825, and *H. (K.) leeuwinensis* Garrard, 1972. Fourteen very immature specimens of the latter species have since become available for study, four having complete protoconchs, and opportunity is taken to describe these.

Haustator (*Kurosioia*) *leeuwinensis* Garrard, 1972

Text figure 1

Protoconch consists of 5 flatly compressed convex whorls, smooth, shining translucent white, nucleus regular and flatly rounded, not submerged, sutures deeply impressed; last whorl terminates with or without a strong growth line conforming to shape of outer-lip, followed by commencement of one sharp ridge or keel on first main whorl immediately below centre; keel appears on first two to five main whorls, usually only two, before becoming flattened and remaining only as a faint striation.



TEXT FIGS. 1-3.

1. *Haustator (Kurosoia) leeuwinensis* Garrard. Protoconch.
2. *H. (K.) gilletti* sp. nov. (Aust. Mus. C. 91263). x 5.6.
3. *H. (K.) gilletti* sp. nov. Protoconch.

Material. Fourteen very immature specimens ex. J. Voorwinde collection, in 93 m off North-West Cape, Western Australia (113° 47' E., 21° 45' S.), Australian Museum, Sydney, Reg'd. No. C. 91262.

Haustator (Kurosoia) gilletti sp. nov.

Text figures 2-3

Description: Shell small, strongly centrally ridged, spire straight-sided, aperture sub-rhomboid, opaque or translucent white. *Protoconch* at least three flatly compressed minute convex whorls, translucent white and shining, nucleus unknown. *Teleoconch* at least nine whorls, first smooth and convex, following 5 or 6 strongly unicarinate, remainder flatly convex, spire straight-sided. *Sutures* oblique and cleanly incised. *Sculpture* of one strong sharp ridge or carina from second main whorl onwards, fading on eighth whorl; carina is situated a little below centre and crossed by multiple microscopic growth lines, conforming to shape of outer lip. *Aperture* sub-rhomboid, columella almost straight and perpendicular; outer-lip thin and sharp with typical deep central sinus; base flatly concave, crossed by numerous microscopic and very oblique growth lines. *Colour* opaque or translucent white, some specimens with minute sub-sutural brown spots. *Operculum* not available.

Type locality. 3 km N.E. of W. side of Gillett Cay, Swain Reefs, southern Barrier Reef, Queensland (152° 25' E., 21° 43' S.), 63-73 m.

Dimensions. Holotype, length 11.1 mm., breadth 3.5 mm., 8 main whorls. Largest paratype, length 14.3 mm., breadth 5 mm., 9 main whorls.

Location of type. Australian Museum, Sydney, Reg'd. No. C. 91263. Collected Australian Museum party, 17-19 October 1962.

Distribution. Type locality only.

Material. Holotype, and 39 paratypes (Aust. Mus. Reg'd. No. C. 91264), all from type locality.

Discussion. Immature specimens of *Gazameda declivis* (A. Adams and Reeve) (= *Turritella captiva* Hedley olim.) could be confused with this new species, and are found in quantity in the same area. Both have the median keel in the early whorls and fine sub-sutural brown spots, however the keel in this new species is decidedly sharper and more prominent; the minute whorls of the protoconch, even if only one remains, contrast sharply with the two broad rapidly expanding whorls of the protoconch in *Gazameda declivis*.

REFERENCE

- GARRARD, T. A., 1972. A Revision of Australian Recent and Tertiary Turritellidae (Gastropoda: Mollusca). *J. Malac. Soc. Aust.*, 2 (3): 267-338, pls. 26-30.